Hudson Bay Mining and Smelting Co., Limited

annual report 1976

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Hudson Bay Mining: diversified and international

As the map and photographs on the facing page testify, Hudson Bay Mining and Smelting Co., Limited has expanded far beyond its original mine (shown below) at Flin Flon, Manitoba, into other natural resources throughout North America and elsewhere in the world.

The Company's growth since incorporation on December 27, 1927, can be measured in several ways:

- in financial terms, the Company is ranked (on the basis of 1975 results) among Canada's top 200 industrial companies as follows: 43rd in assets, 69th in net income and 79th in sales;
- in terms of people, at year-end 1976 the Company, including subsidiaries and divisions, employed approximately 4,000 persons;
- geographically, our interests range from the high Arctic to Mexico, throughout Canada and the United States, and overseas to Indonesia;
- the range of products and services has been broadened from copper, zinc, cadmium, gold and silver to include chemicals and fertilizers, crude oil and natural gas, zinc oxide and zinc-base diecastings, exploration and development;
- a one-mine company in 1927, Hudson Bay Mining today is the hub of a group of natural-resource companies, each one linked to the centre by a combination of equity ownership and management.

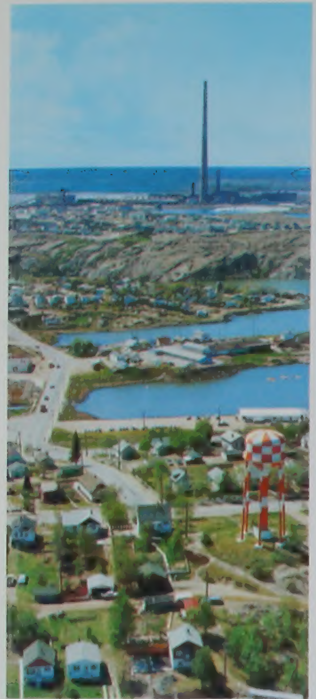
The Company began to develop slowly as a diversified natural-resource company shortly after the mid-1960s but accelerated its expansion early in the following decade. Prior to 1965, the Company devoted itself entirely to base-metal mining in Manitoba and Saskatchewan.

A cluster of mines near Flin Flon and a similar grouping at Snow Lake, 140 road miles east of Flin Flon, has enabled the Company over the years to maintain its own ore reserves close to the original 18,000,000 tons discovered in 1915 – while mining slightly more than 78,000,000 tons since the beginning of operations at the Flin Flon mine in 1930. Metals remain a key factor in the Company's forward planning: two new copper-zinc mines near Flin Flon are scheduled to come into production in 1977.

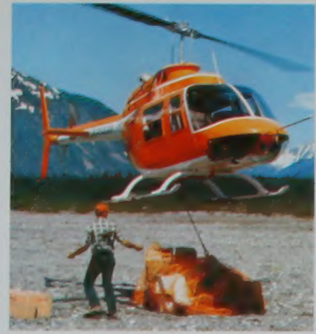
Diversification has enabled the Company to establish a strong position in oil and gas through Francana Oil & Gas Ltd., Trend Exploration Limited and Canadian Merrill Ltd., in fertilizers and chemicals through Terra Chemicals International, Inc., and in additional copper mining through Inspiration Consolidated Copper Company. The new skills, knowledge and experience of the people from these wider operations complement the Company's own expertise in base-metal mining which has been developed over the years.

On the eve of its 50th anniversary, the Company is involved in a program of consolidation. One major disposal has already been profitably completed. Equity investments in several associated companies have been increased. The new administrative challenges that accompany diversification are being met by appropriate changes and modifications of responsibilities at various levels of management.

The Company is solidly committed to remain in the natural-resource field. And although the interests in oil and gas, chemicals and fertilizers have reduced the degree of dependency on cyclical metal markets, base-metal mining will continue to play a leading role because of the firm belief that metals will always be a cornerstone of economic development throughout the world.



Flin Flon Mine and plant



Stikine Copper Limited

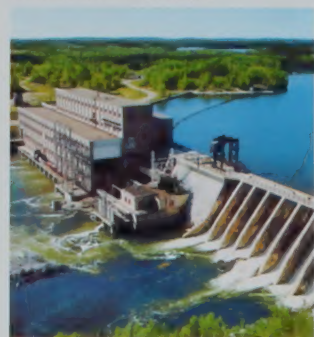
Canadian Merrill Ltd.

Hudson Bay Air Transport Ltd.

Francana Oil & Gas Ltd.

Minsearch Surveys Limited

Hudson Bay Diecastings Ltd.

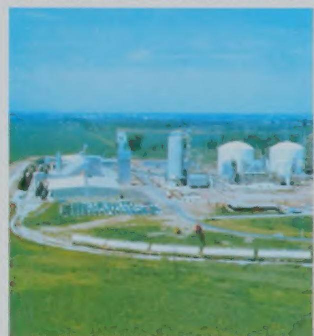


Churchill River Power Co. Ltd.

Zochem Limited

Sylvite of Canada Division

Inspiration Consolidated Copper



Terra Chemicals International

Exploration camp

Snow Lake, Manitoba

Francana Minerals Ltd.

Trend Exploration Limited

Whitehorse Copper Mines Ltd.

1. Flin Flon Mine and metallurgical complex (base metals)
2. Sylvite of Canada Division (potash)
3. Snow Lake (base metals)
4. Stikine Copper Limited
5. Hudson Bay Diecastings Limited (zinc-base diecastings)
6. Inspiration Consolidated Copper Company
7. Francana Minerals Ltd. (sodium sulphate)
8. Canadian Merrill Ltd. (oil & gas)
9. Churchill River Power Company Limited
10. Terra Chemicals International, Inc. (fertilizers)
11. Petromer Trend (oil & gas – Indonesia)
12. Hudson Bay Air Transport Limited
13. Zochem Limited (zinc oxide)
14. Hudson Bay Exploration and Development Company Limited
15. Whitehorse Copper Mines Ltd.
16. Francana Oil & Gas Ltd.
17. Minsearch Surveys Limited
18. Head Office (Toronto)
19. Lytton Minerals Limited (La Verde copper deposit)
20. Trend Exploration Limited

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Report of the Directors

During the year, the Company increased its equity in Minsearch Surveys Limited to 35% from 25%. Minsearch was formed early in 1974 to use Airtrace, an airborne biogeochemical exploration system patented by Barringer Research Ltd., of Toronto.

In return for expenditures for diamond-drilling during the summer, the Company's interest in the Stikine Copper property in northern British Columbia has been increased to 34.5% from 31.7% under an agreement with Kenneco (Stikine) Mining Limited and Cominco Ltd. If the property is brought into production the interest may be increased to 45%. Although the Stikine deposit is not viable under present conditions, we consider that our interest will be a valuable asset as copper prices move higher and transportation facilities are improved.

A reassessment of the La Verde copper project in Mexico, in which your Company has an interest through its 33.9% holding in Lytton Minerals Limited, of Vancouver, is underway. Development of the project had been deferred during 1976 following a feasibility study and the subsequent withdrawal of one of the Mexican partners in the project. With the project being inactive, a capital-reduction program was instituted which resulted, in July, 1976, in the return to the La Verde shareholders of uncommitted funds. Lytton received approximately $1 million which was used principally to reduce loans from your Company and Amcan.

The new study is expected to be completed in the first quarter of 1977. It is hoped a decision whether to proceed with development can be made soon thereafter. It must be emphasized, however, that the development of the project cannot proceed until a replacement Mexican partner is located. With the significant peso devaluation, not only has the liquidity of the nation been strained, but also that of the private industrial sector. The continued search for a new Mexican partner could, therefore, delay development plans even if the profitability of the project should appear acceptable.

In view of the delays that have occurred and the uncertainties that still exist, it was considered prudent to make a provision against our investment in Lytton and accordingly $3,327,000 has been included in extraordinary items.

Regrettably, the positive aspects of our business during the past year were overshadowed by negative events beyond our control, making 1976, on balance, a year of frustration.

The positive aspects do not show up in our accounts for the year since they are largely in the field of consolidation and reorganization to meet the challenges and to take advantage of opportunities that the future will bring.

It was the culmination of the adverse factors that was primarily responsible for the disappointing earnings of $2,819,000 before extraordinary items and a loss of $8,279,000 after writing down our investment in Indonesia and making a provision against our investment in Mexico.

Metals

The most adverse factor has been the continued weakness of metal markets, so that for the second successive year our base-metal sector, the major element of our business, reflected a loss. In the case of our Flin Flon-Snow Lake operations, the situation has been aggravated by the difficulty of obtaining an adequate supply of skilled labor. It is expected that the new three-year labor agreement signed late in December will improve our labor supply, although the cost of the settlement is one that we can ill afford at present metal prices.

Inspiration Consolidated Copper Company, our most recent investment in the U.S., has undergone a major management reorganization, resulting in significant improvements in operations, and is engaged in extensive studies to maximize its potential. Additional shares of Inspiration were purchased during the year and at year-end your Company held 739,500 common shares, or approximately 23% of the shares outstanding.

At year-end the Company increased its equity interest in Whitehorse Copper Mines Ltd. to 41.2% from 20.6% by acquiring the 698,115 common shares (20.6%) held by Anglo American Corporation of Canada Limited (Amcan). Early in 1977, your Company's 16⅔% interest in a joint venture with Whitehorse Copper was sold to Amcan, increasing Amcan's interest in the joint venture from 16⅔% to 33⅓%. Our beneficial interest in Whitehorse Copper remains substantially the same.

Fertilizers and chemicals

Reduced prices have also borne heavily on our chemical and fertilizer operations. Fortunately, high levels of efficiency and output have been maintained both in our Sylvite division in Saskatchewan and at Terra Chemicals International, Inc. in the United States. The latter increased its tonnage sold but revenue was lower and although profit was reduced, Terra has been the largest single contributor of earnings to your Company. Terra has taken a 25% interest in a major new ammonia plant in Oklahoma and is expanding the scope of its marketing operations to dispose of product which should come on stream about September, 1977.

Sylvite, too, made a satisfactory pre-tax profit but due to the rapacity of governments, provincial and federal, it was unable to contribute to corporate earnings.

On March 7, 1977, the Company agreed in principle to sell its potash assets in Saskatchewan to the Potash Corporation of Saskatchewan, a Saskatchewan Government Crown corporation, for $144 million in cash. The assets sold do not include cash, accounts receivable, inventories of refined potash, and marketing assets.

The sale is subject to the execution of a detailed purchase agreement and the transfer of ownership is expected to take place around mid-April. Satisfactory arrangements are being made for a continuing supply of potash from the Potash Corporation for Terra, in which the Company has a 51% equity interest.

Following the enactment in January, 1976, of The Potash Development Act and the creation of the Potash Corporation of Saskatchewan with power to purchase or expropriate potash mining assets in the province, the Saskatchewan Government announced its initial goal of provincial ownership of at least 50% of the province's potash-producing capacity. We were subsequently advised of the government's intention with respect to our Sylvite of Canada division. Evaluations of Sylvite's assets were made by a government team and by your Company and negotiations that led to the sale of Sylvite commenced during the fall of 1976.

Your Company has always maintained that it would be an unwilling seller; however, given the government's intentions, we are satisfied that under the circumstances we have achieved the best possible deal for our shareholders.

Oil and gas

Only in the oil and gas sector of our business are prices firm, but the decision of the Indonesian Government unilaterally to renegotiate the oil production-sharing contract with Trend Exploration Limited seriously reduced our earnings for the year and contributed to the reduction in the value of our investment.

Our earnings were adversely affected by the requirement to make a special payment to Pertamina, the Indonesian state-owned oil agency, with respect to 1976 operations, which significantly reduced earnings – despite an increase in production for the year.

In addition, the estimated recoverable reserves in Indonesia have been severely reduced because of production problems and the changed economics arising from the revised production-sharing contract.

We therefore deemed it prudent to reduce the value of our investment in Indonesia to a level which reflects our estimate of its current value and this has resulted in an extraordinary charge to our earnings statement of $10,806,000. As a result of making this charge, the annual amortization charge in future years will be greatly reduced.

Given the full cost accounting method used, earnings will be high when development and exploration expenditures, some of which are recoverable immediately, are also high, while the converse applies to cash flow. Such expenditures will be reduced in 1977 and are currently forecast to diminish even further thereafter. As a result, earnings may decline in future but net cash flows should increase accordingly.

To enable shareholders to have a better understanding of the results of the Indonesian operations, it should be noted that the net cash flows to Trend, after incurring $15,386,000 and $11,796,000 of exploration and development expenditures, were $10,392,000 and $8,965,000 in 1975 and 1976, respectively.

Since the end of 1975, we have increased our equity interest in Canadian Merrill Limited from 29.1% to 49.2%, part of which was acquired through the issuance of 158,606 Hudson Bay Mining common shares. Canadian Merrill reported significantly improved earnings and cash flows during the year, as a result of increased production and higher product prices.

A merger between Western Decalta Petroleum Limited and Francana Oil & Gas Ltd. was considered, but for tax and other reasons was not feasible. Subsequently, our investment in Western Decalta was sold in October for a total consideration of $37.8 million, resulting in an after-tax gain of approximately $3 million.

Directors and executive appointments

E. Peter Gush was appointed President on February 10, 1977, succeeding W. A. Morrice who retired from the Company on February 28 but agreed to remain a Director.

On January 1, 1977, Mr. Gush was appointed a Director to fill the vacancy created by the resignation of G. H. Waddell. Both Mr. Gush and Mr. Waddell are Executive Directors of Anglo American Corporation of South Africa Limited, of Johannesburg.

Mr. Morrice's retirement ended an unprecedented second term as President: he had previously been President from September, 1971, until his initial retirement on December 31, 1973. Mr. Morrice joined the

Building the road from Flin Flon to Westarm Mine

Company in June, 1940, and has been a Director since April, 1971. His broad experience and sound judgment are highly respected and the Board is grateful for his long and valued service and his continuing contribution as a Director.

The following appointments were made during the year: Adrian M. Doull, Senior Vice-President – Finance; C. Keith Taylor, Q.C., Senior Vice-President, Secretary and General Counsel; Robert B. Cairns, Vice-President – Exploration to succeed Dr. J. Blair Howkins who was appointed President of Inspiration Consolidated Copper Company; J. Robert G. Sadler, Vice-President – Mining, as Vice-President of the newly formed Canadian Metals Division.

Lawrence W. Ogryzlo retired as Vice-President – Development on August 31, 1976. He joined the Company in November, 1943, and had been Vice-President – Exploration from April, 1967, until May, 1973, when he assumed responsibility for the Development Group.

Outlook

The fortunes of the Company are essentially linked with the trend of the world and particularly the North American economy. All the indicators appear to place the latter in a recovery phase with some uncertainties about unemployment. In Canada, which has lagged somewhat behind the United States, the need for stimulation is recognized and the federal government's spring budget will attempt to achieve this without rekindling the fires of inflation.

There is an evident oversupply of copper throughout the world – inventories total more than two million short tons – and it is doubtful whether the rebuilding of inventories which traditionally accompanies a pickup in demand will absorb these quantities. The industry-wide labor contract negotiations in the U.S. which are due in July, 1977, therefore assume a particular significance. The upward trend in metal market prices in London and New York, which has been followed by increases in U.S. and Canadian domestic prices, generally reflects uncertainty about the outcome of these negotiations and consequent hedge-buying by consumers.

Demand for zinc in 1977 is expected to be slightly higher than in 1976. The main growth area is still in the galvanizing of steel sheet; however, the overall sales figure will reflect the stronger competition from aluminum and plastics as automobile manufacturers continue their efforts to reduce the weight of vehicles. Many zinc producers are still operating at less than full capacity; on a free-world basis, production is estimated at 80% of capacity. The Canadian price is expected to reach parity with the U.S. price of 37¢ per lb. in the first half of the year and a further increase in the North American price is anticipated. In Europe, weak prices on the LME are depressing producer prices but both are expected to strengthen during the last six months of 1977 as economic conditions in Europe improve.

With respect to oil and gas, we believe that the current upward trend of oil and gas prices in the North American markets will continue toward levels that are equal to world prices and energy equivalents. All segments of the industry in Canada and the U.S. will benefit as steps are taken to avoid a repetition of the critical shortage of natural gas that occurred in the U.S. during severe winter weather.

Provided that moisture levels are adequate on farmlands throughout North America and that prices for farm commodities do not weaken, there should be a strong demand for most fertilizer products in the spring of 1977 accompanied by upward pressure on prices. Potash is one exception, however, and prices and demand are expected to remain at their 1976 levels. It should be noted that the rising price for natural gas will be reflected in higher production costs, especially for ammonia.

In spite of the uncertain demand and prices for our products and the continuing encroachment of governments in the development of natural resources, we believe that the fundamental importance of these industries will again make them an attractive area for investment. In particular, base metals will continue to be an important, if not the major part of our business and we will continue to look for new opportunities and strive to optimize the return on our existing investment. We also intend to expand in the oil and gas business with emphasis being placed in North America.

While our investment in the fertilizer business has been severely reduced as a result of the sale of our Sylvite division, this area nevertheless remains attractive, and one which provides scope for expansion.

The past year has been a difficult one, but we believe we are in a good position to make the most of our opportunities in 1977. The Company is in a sound financial position and our people, who have valuable expertise – an important asset – are looking forward to this challenge.

On behalf of the Board,

W R Fraser

Chairman

Wilson

March 14, 1977

President

New division formed

The Canadian Metals Division was formed in June to rationalize mining, manufacturing and marketing operations in metals and related products in Canada. The new division is responsible for the following activities:

- mining and metallurgical operations at Flin Flon and Snow Lake;
- metal sales and purchases of concentrates;
- manufacture and sale of zinc oxide by Zochem Limited, a wholly owned subsidiary;
- manufacture and sale of zinc-base diecastings by Hudson Bay Diecastings Limited, also a wholly owned subsidiary;
- the Company's interest in Whitehorse Copper Mines Ltd.;
- close liaison with the Company's transportation and distribution department for the movement of all raw materials and finished products relative to the division's operations.

Pouring converter slag into the reverberatory furnace in the smelter at Flin Flon to recover additional copper

Review of Operations

Metals

One of the objectives of the new division is to unify control of all metal-related operations in order to achieve an efficient flow of products from mine to market on a straight-line basis. Another is to operate with a substantial degree of self-sufficiency and autonomy.

Flin Flon-Snow Lake operations

Production of metals from all sources was as follows: refined copper – 122,550,033 lbs.; slab zinc – 120,859,908 lbs.; cadmium – 282,995 lbs.; selenium – 120,194 lbs.; gold – 65,734 ozs.; and silver – 1,220,853 ozs.; 504 tons of lead concentrate containing 138 ozs. of gold, 14,312 ozs. of silver, and 695,480 lbs. of lead.

Producing mines. Six of the 11 mines in the Flin Flon – Snow Lake area operated continuously. Ore production totalled 1,562,438 tons, 92,333 tons more than the tonnage mined in 1975.

Remnants and pillars continue to be the main source of ore in the Flin Flon Mine and 190,755 tons were mined from areas not previously included in the ore reserves. A diesel front-end loader operating from a system of ramps in partially caved remnants and pillars was the main reason why production was 174,897 tons higher than 1975's tonnage. This method of production will be continued.

As expected, Schist Lake Mine's reserves were exhausted early in the year and the mine was permanently closed in March.

Dickstone Mine, which the Company operated on a profit-sharing basis for Dickstone Copper Mines Limited, has been shut down since August, 1975, because of low metal prices.

White Lake Mine interrupted production in August to permit development of the ore below the bottom level. A mine-development contractor began shaft-deepening in September and finished in December. Lateral development is underway and production will be resumed in the latter part of 1977.

Chisel Lake Mine and Ghost Lake Mine produced 11,409 tons less than in 1975, primarily to reduce the buildup of refined zinc inventory at Flin Flon as sales slumped.

Stall Lake Mine increased production by 42,535 tons and a further increase can be expected from continued upgrading of mining methods and possible improvement in the labor supply.

Anderson Lake Mine and Osborne Lake Mine increased production by 19,647 tons and 2,246 tons, respectively. Further increases are expected in both mines, mainly due to anticipated improvements in the labor supply.

Mines under development. Lateral development at Centennial Mine on all eight levels totalled 14,260 feet. Installation of a crusher on the bottom level is underway. Full production is scheduled to begin in mid-1977.

		ore production/average assays				
mine	tons	Au oz./ton	Ag oz./ton	Cu %	Zn %	Pb %
Flin Flon	748,672	0.04	0.7	1.7	2.2	—
Anderson Lake	129,719	0.03	0.3	3.3	0.1	—
Chisel Lake	117,198	0.06	1.2	0.8	10.8	0.5
Osborne Lake	193,736	0.02	0.2	3.1	1.9	—
Schist Lake	15,320	0.03	0.9	3.0	6.0	—
Stall Lake	205,901	0.03	0.3	4.1	0.2	—
White Lake	55,192	0.02	0.7	1.9	4.7	—
Ghost Lake	34,995	0.07	1.6	1.2	10.1	0.5
Centennial*	61,705	0.03	0.6	1.3	2.1	—

*under development.

The shaft at Westarm Mine was completed at 1,904 feet below surface. One level station, one loading pocket and one spill pocket were excavated. Except for the crusher, all equipment has been installed. Lateral development has been started on all eight levels and has reached the ore zone on the 1,475-foot level. Production is scheduled to begin September 1, 1977.

Reserves. Proven reserves of copper-zinc ore in the Company's mines in the Flin Flon – Snow Lake area at year-end totalled 17,535,800 tons, assaying gold, 0.035 ozs. per ton; silver 0.55 ozs. per ton; copper, 2.66%; zinc 2.9%. The new calculation included average waste dilution of 17% and average estimated recovery of 91% of diluted tonnage. Ore reserves at year-end 1975 totalled 17,453,800 tons.

Metallurgical operations. The concentrator treated 1,562,655 tons of ore, or 6,276 tons per operating day (five days per week).

	1976	1975
tons of ore treated	1,562,655	1,470,157
Au – oz./ton	.04	.03
Ag – oz./ton	.6	.6
Cu – %	2.3	2.4
Zn – %	2.7	3.0
Pb – %	.2	.2

The following concentrates were produced from the ore treated:

		assays				
concentrates	tons	Au oz./ton	Ag oz./ton	Cu %	Zn %	Pb %
copper	192,541	.16	3.0	17.02	3.3	.3
zinc	55,158	.09	1.6	.74	47.7	.7
lead	504	.27	28.4	.35	2.9	69.0

Zinc refinery. The production cutback initiated in 1975 to reduce inventory was continued throughout 1976 at 77% of capacity, reducing the stockpile of zinc at year-end to 8,393 tons, compared with 15,932 tons a year ago.

Tonnages and assays of materials treated were as follows:

		assays			
	tons	Au oz./ton	Ag oz./ton	Cu %	Zn %
HBM&S concentrates	55,459	.092	1.601	.731	47.665
purchased concentrates	74,373	—	1.196	.897	51.011
oxides	26,639	.009	.846	.624	64.505

Production of sulphide residue totalled 51,293 tons, all delivered to the smelter. Production of oxide residue reached 6,374 tons, which were stockpiled.

The amounts of refined zinc and cadmium produced for the Company's account were as follows:

	Zn/lbs.	Cd/lbs.
Hudson Bay feed	52,149,463	93,765
purchased concentrates	68,710,445	189,230
total	120,859,908	282,995

Copper smelter. Tonnages and assays of materials treated were as follows:

		assays			
	tons	Au oz./ton	Ag oz./ton	Cu %	Zn %
HBM&S concentrates	192,468	0.180	2.956	17.040	3.341
residues, etc.	58,023	0.095	3.218	1.172	26.982
purchased concentrates	109,106	0.284	4.908	29.455	2.834

Tonnage and metal content of anode copper produced for the Company's account and for shipment to the refinery are as follows:

	tons	Au/oz.	Ag/oz.	Cu/lbs.	Se/lbs.
Hudson Bay feed	30,247	38,362	619,479	60,174,789	120,194
purchased concentrates	31,803	30,523	604,112	63,271,860	—
total	62,050	68,885	1,223,591	123,446,649	120,194

Stack dust from the smelter baghouse totalled 5,234 tons, assaying 31.5% Zn, 3.16% Cu, 13.32% Pb and 1.32% Cd.

Slag treated in the fuming furnaces totalled 318,567 tons, yielding 21,136 tons of oxide fume containing 30,634,941 lbs. of zinc.

The smelter was shut down for seven days in October for maintenance work in the reverberatory furnace; the rebricking cycle has now been extended to 18 months from the traditional 12-month interval.

Environmental control, process technology. The environmental control and research-assay departments were combined on January 1, 1976, to form the environmental control and process technology department.

Concern over the in-plant environment, particularly industrial hygiene, and the Company's policy of ensuring the best practicable working conditions throughout the plant were evident in a wide range of monitoring and engineering activities.

Research, monitoring and abatement projects related to the out-of-plant environment continued and department personnel were involved in a large number of federal and provincial government task forces and working groups.

The process technology group became involved in projects to improve the metallurgy and economics of the zinc-extraction process; these projects will be continued. Extensive technical and economic studies were undertaken on ores from Centennial and Westarm mines as well as from the Snow Lake-area mines.

Major projects. At year-end the Company was evaluating the feasibility of building a large concentrator adjacent to Stall Lake Mine in the Snow Lake area which would eliminate transporting ore from certain mines to Flin Flon for treatment. Housing for employees in Snow Lake is being improved: two 20-man trailer units were delivered in August and construction of 12 single-family houses is underway. Six of the houses were completed at year-end. Work has been started on the conversion of the zinc tankhouse in Flin Flon to gang-stripping and the ventilation system is being improved. All concrete work was completed on the new storage bins that will hold ore hauled by trucks to Flin Flon for treatment. The estimated combined cost of these projects upon completion, excluding the proposed concentrator, is $5.5 million.

Industrial relations. On December 9, the Company and the 10 union locals representing approximately 1,900 certified employees at the Company's operations at Flin Flon and Snow Lake signed a new collective agreement that will remain in effect until September 30, 1979. It provides for retroactive payment of wages and certain benefits to October 1, 1976, and includes the following across-the-board hourly increases: 80¢ effective October 1, 1976; an additional 20¢ effective October 1, 1977; an additional 20¢ effective October 1, 1978. (The lowest hourly rate in the final year of the previous agreement was $4.95 for a laborer.)

The agreement is subject to the provisions of the Anti-Inflation Act. Since the level of wages and benefits exceed the permissible increases under the Act, a temporary interim payment of 60¢ per hour is being paid to employees, pending a decision under the Act, for all hours which would normally have qualified for the increase had the new rates been in effect on October 1, 1976. The agreement has been submitted to the Anti-Inflation Board for approval. The Company contends that the agreement should be approved for two reasons: there is a long-standing historical relationship with other mining communities in northern Manitoba regarding labor agreements; and the Company must remain competitive in the labor market.

The high rate of turnover continued throughout the year. There were 2,372 employees on the payroll at year-end, compared with 2,461 at the end of 1975.

There was a continuing lack of trained workers, especially those with mining experience and recruiting programs were again conducted in the Prairie Provinces, the Maritimes and Ontario.

By the end of the year 1,476 employees, past and present, had completed at least 25 years of service; 70 employees became members of the 25-Year Watch Group in 1976. The number of employees with 25 years or more of service on the payroll at year-end was 633.

Programs to assist employees in their personal development included:

- special orientation and basic training for native northerners;
- Company assistance through tuition refund, education leave and Company-sponsored evening classes in metrication, carpentry, underground timbering, underground blueprint reading and secretarial skills;
- job training; at year-end 96 apprentices were registered in 10 trades;
- supervisory training;
- a five-day basic training and orientation course for the mine department; a similar program is being prepared for surface workers.

Whitehorse Copper Mines Ltd.

Net earnings for 1976 before an extraordinary item were $435,000, compared with a loss of $749,000 for 1975. The extraordinary item represents a reduction of $123,000 in income tax on carry-forward of prior years' losses and increased net earnings for the year to $558,000.

Although 70 production days were lost during a strike, production from the joint venture totalled 800,836 tons, compared with 739,000 in 1975. Concentrate production totalled 29,693 tons, all of which were shipped to your Company's smelter at Flin Flon.

Production for the year came mainly from development and the 1750 block. Until the crusher and conveyor system are installed on the 1300-ft. level, scheduled for early 1977, production will be maintained from the 1730 level and the 1750 block.

Underground diamond-drilling indicates there is a limited extension of ore on the south section of the Little Chief Orebody. This will be drilled and evaluated early in 1977.

At the conclusion of the strike, a two-year agreement, effective until December 31, 1977, was signed with the United Steelworkers of America. The monetary amounts agreed to exceeded the limits set out by the Anti-Inflation Board and an application for AIB approval has been submitted.

Hudson Bay Diecastings Limited

Gross sales were 28% higher than in 1975 and tonnage of zinc processed increased to 3,650 from 3,250. On July 1, a general price increase of approximately 7.5% became effective, reflecting higher operating costs.

There is continued competition from makers of plastic parts as the automobile industry increases its efforts to reduce the weight of vehicles and to reduce costs generally. The expected effect on the diecasting industry is lower sales of castings and a subsequent drop in production.

A new two-year contract was signed in July with the United Auto Workers which represents hourly paid personnel. The average number of employees during the year was 200.

Zochem Limited

Production and sales were approximately 7% and 8% higher, respectively, than in 1975 but still below expectations. Despite the increase, the plant operated at only about 60% of capacity, now rated at about 70 tons per day.

A severe strike in the U.S. rubber industry combined with a sluggish economy in North America to depress activity in the zinc oxide industry. Prices improved toward the end of the year but a drop in sales volume offset the benefits expected from efficiencies achieved in operations.

A new two-year contract was signed in June with the Canadian Chemical workers which replaced the International Chemical Workers Union.

Inspiration Consolidated Copper Company

Net earnings for 1976 were $126,000, compared with a net loss of $3,910,000 in 1975. The unsatisfactory earnings reflect a continued soft copper market with resulting low demand and low prices.

In 1976, deliveries of 90,593,000 lbs. of copper at an average price of 69.48¢ per lb. together with income from minor amounts of other metals and from smelting copper-bearing materials for other producers yielded gross proceeds of $91,535,000, compared with

$79,139,000 during 1975. Deliveries of copper during 1975 totalled 87,425,000 lbs. at an average price of 63.34¢ per lb.

In order to comply with Arizona clean-air requirements, Inspiration installed a new electric furnace, five new converters, an acid plant and the necessary auxiliary equipment, using the latest available technology. The cost of the new facilities was more than $62,000,000; to meet the capital cost of this project, $54,900,000 was borrowed on a long-term basis. The total amount of long-term debt outstanding at the end of 1976 was $34,202,000, compared with $40,430,000 a year earlier; the reduction was achieved by using funds from an improved cash flow from operations during the year.

The new smelter experienced startup difficulties and total through-put of new copper-bearing material amounted to 299,000 tons in 1975 and 386,000 tons in 1976. The plant is expected to reach its rated capacity of 450,000 tons per year in 1977 as the remaining problems in the materials-handling and gas-cleaning systems are solved.

Production at the Inspiration-area mines remained at just over 70% capacity throughout the year, but the Christmas mine, about 40 miles from Inspiration, returned to full production on August 9 as the demand for copper improved. It is expected that operations at Inspiration will remain at the curtailed rate until the accumulated inventory of revert copper held up at the smelter is processed through the plant and until market conditions for copper improve.

Exploration

Hudson Bay Exploration and Development Company Limited explored for its own account in Manitoba and Saskatchewan, and participated in joint-venture programs with Amcan and Tombill Mines Limited in the Yukon, Ontario, Quebec, and in certain uranium prospect areas in Manitoba and Saskatchewan.

On exploration projects, diamond-drilling totalling 72,857 feet tested 166 geophysical anomalies and explored several mineralized zones. In addition, the 17,444 feet drilled in 24 holes on the Stikine Copper property was designed to confirm and extend the ore reserves in the Central Zone. A small tonnage has been added to the reserves by increasing the size of known ore blocks in the north part of the Central Zone. A detailed recalculation of reserves based on new bench plans is underway but no further drilling is planned at present.

In the Yukon, further drilling of 6,216 feet in 12 holes was done in the zinc-lead zone discovered in 1975 by the joint-venture program with Amcan. However, the results did not indicate sufficient size potential to warrant further work at this time.

The 1977 budget controlled by Hudson Bay Exploration totals $4.04 million. It includes approximately $920,000 to be contributed by Amcan and Tombill under a joint-venture agreement, and about $620,000 expected from the governments of Manitoba and Saskatchewan under joint-venture agreements involving programs planned on property held as claims and claim blocks in both provinces. During 1976, the reduced programs in Manitoba and Saskatchewan were done on ground held as leases and there was no participation by the provincial governments.

Minsearch Surveys continued testing and improving the Barringer Airtrace System and flew 4,033 miles of test and production surveys in Canada, the U.S., the Caribbean and South Africa.

The EM-30 airborne electromagnetic survey system was licensed in its Mark II version to Geoterrex Ltd., a survey contractor, on a rental and royalty basis. An improved and more powerful Mark III version of the system has been built and installed in a DC-3 aircraft, and is ready for test surveys over some of the Company's project areas where reliable penetration of deep, conductive overburden is a requirement.

Metal prices and markets

There were five changes in the Canadian price for copper wirebar during the year, three increases and two reductions. The net result of these changes was a higher price at year-end, 67.125¢ per lb., compared with 63.375¢ at the beginning of the year. The high during the year was 72.375¢.

On the London Metal Exchange, which determines prices for copper sales overseas, the price moved from 54.238¢ per lb. at the beginning of the year to a high of 73.655¢ in July but ended the year at 62.005¢.

The geographic distribution of copper sales was as follows: Canada – 37% (26% in 1975); overseas – 63% (74%). The Company did not sell copper in the U.S.

The Canadian base price for zinc rose from 37¢ per lb. in January to 39¢ in August but fell to 36.25¢ in October and remained unchanged for the rest of the year. In the U.S. the price dropped 2¢ per lb. during the year, from 39¢ to 37¢. The European producer price remained steady at U.S.$795 per metric ton (36.59¢ Cdn. per lb.) throughout the year.

The geographic distribution of zinc sales was as follows: Canada – 50% (57% in 1975); U.S. – 43% (27%); overseas – 7% (16%).

At year-end, the price for gold was U.S.$134.55 per oz., down from U.S.$138.60 in January; silver was marginally higher at U.S.$4.375 per oz., compared with U.S.$4.240.

Diamond-drilling in the Flin Flon Mine

Fertilizers and chemicals

Sylvite of Canada

The Company's potash division produced 957,169 tons of potash and sold 979,875 tons during the year. Comparable figures for 1975 are 901,444 tons and 970,686 tons, respectively. The 1976 production total is 79.8% of the refinery's rated capacity of 1.2 million tons annually.

The four-rotor mining machine ordered in December, 1974, arrived in June ahead of schedule and was lowered down the production shaft during the summer vacation period. By year-end the new machine was developing a mining panel south of the shaft. Sylvite now has three four-rotor mining machines which will facilitate the planning of development mining, production mining and maintenance schedules.

Reserves at year-end totalled 334 million tons, compared with 340 million tons a year earlier. The ore reserves are based only on the small portion of the subsurface mineral lease that has been explored and unitized.

The North American market was fairly strong during the year but the overseas market was weak in both volume and price. In the first six months of the year the price in the domestic market was approximately $42.50 per ton; in July and August, it dropped to a low of $35 but rose to around $41 in the last four months of the year in response to a strong demand. The price in the overseas market deteriorated early in 1976, reaching a low of $25 per ton and there was very little improvement during the remainder of the year.

Canadian sales accounted for 12% (10.5% in 1975) of total sales; U.S. markets – 70% (63.5%); overseas – 18% (26%). Sylvite's own sales staff handled Canadian sales; all overseas sales were handled by Canpotex, the export association formed by producers in Canada.

Terra Chemicals International, Inc.

Net earnings totalled $11,994,000 ($18,565,000 in 1975). Revenues were $103,650,000 ($110,653,000).

Although tonnage sold in 1976 was ahead of 1975 levels, prices throughout the fertilizer industry were lower which together with increasing costs, particularly for natural gas, reduced earnings.

Headquartered in Sioux City, Iowa, Terra manufactures nitrogen-base fertilizer and nitrogen feed ingredients. It also produces and upgrades ammonia and purchases other chemical fertilizers that are blended with the produced nitrogen products.

Terra sells to the agricultural market through a multi-tiered marketing structure. A retail distribution network of farm service centres sells direct to the farmer in Terra's primary seven-state Midwest marketing area. Produced and purchased nitrogen, phosphate and potash products are sold to the wholesale dealer and distributor market throughout the U.S. Terra is also the major U.S. sales agent for potash produced by Sylvite of Canada.

Development is planned within the agricultural industry as a part of the vital food-production business. Several projects have been initiated to further Terra's integrated program of nitrogen marketing expansion, maintaining a balance of wholesale and retail sales and a complete product mix for the growth of crops.

Terra has a 25% interest in a 1,200-ton-per-day ammonia plant being built in Woodward, Oklahoma, as a partner in the Oklahoma Nitrogen Company. W. R. Grace & Co., the operating partner, owns 50% and Gulf Oil Company the remaining 25%. Terra's interest in this plant, which is expected to be on stream by September, 1977, will increase Terra's nitrogen capacity by 50%.

Most of Terra's share of the ammonia production will be converted to urea ammonia nitrate solutions and urea liquor at a 780-ton-per-day upgrading facility to be constructed adjacent to the ammonia plant. Terra will act as manager of the plant and will retain a 63% interest, with W. R. Grace holding the remaining 37%. The facility is expected to be on stream in the first quarter of 1978 and will double Terra's urea liquor supply and add 75% to the fertilizer solutions capacity.

In August, 1976, Terra purchased the PRO-SIL® production plant at Blair, Nebraska, with exclusive rights to sell this silage protein additive in its seven-state Midwest territory, an important U.S. market for this material. PRO-SIL® fits well into Terra's product line; the production and marketing period of July through October counterbalances the fertilizer sales activities in the spring and late fall.

Francana Minerals Ltd.

Although the volume of sales of sodium sulphate in 1976 was about the same as in 1975, prices were higher and revenue was the highest in the company's history. However, due to higher costs of natural gas, power and labor, profit and cash flow were lower than in 1975.

Conveying potash ore from the ore transfer building on surface to the top of the refinery

Francana Oil & Gas Ltd. and Trend Exploration Limited

Consolidated earnings, before an extraordinary charge, for 1976 were $2,689,000, equal to 35¢ per share ($10,125,000, $1.30 per share in 1975). Total revenue was $62,559,000 ($55,812,000) and funds generated from operations totalled $26,511,000 ($30,994,000).

As announced last November, modifications required by the Indonesian Government to the oil production-sharing contract in which Trend, 57% owned by Francana, has a 27% interest, became effective on January 1, 1977. The amendments require contractors to recover capital investment over a period of years rather than in the year of expenditure and increase the share of profits for Pertamina, the Indonesian state-owned oil agency, to 85%. Contractors were also required to make a special payment to Pertamina with respect to 1976 production. Trend's share of the special payment reduced Francana's revenue by $8,620,000 and, after deducting minority interests, Francana's earnings were reduced by $4,900,000 and your Company's by $2,700,000.

In addition, a reassessment of Trend's interest in Indonesia due to production problems and the changed economics resulting from the contract amendments has severely reduced the estimated recoverable oil reserves. As a result, an extraordinary charge of $19,679,000, after deducting minority interest therein, was made against Francana's earnings. This charge represents the balance of the excess of the cost of Francana's investment in Trend over the underlying equity in its net assets at December 31, 1976 and resulted in a loss in Francana for 1976 of $16,989,000, or $2.18 per share. There were no extraordinary items in 1975.

Exploration and development expenditures for Francana and Trend, which included land acquisition and retention, geological and geophysical work, drilling and production equipment, were $20,759,000 ($24,070,000).

Francana's sales from its North American properties totalled 695,000 barrels of crude oil (738,000 barrels) and 2,940 million cubic feet of natural gas (2,800 million cubic feet).

Review of Operations

Oil and gas

The 1976 exploratory and development drilling program included a participation in nine oil wells, three oil and gas wells, 10 gas wells and 11 dry holes.

Estimated proved and probable reserves at year-end were 13,058,800 barrels of crude oil and natural-gas liquids and 86,200 million cubic feet of natural gas.

Oil production is expected to increase by 3% in 1977 based on the planned development and exploration program, while gas production is forecast to increase by 80%, mainly from new plants going on stream.

Trend's North American operations produced 301,000 barrels of crude oil (347,400 barrels) and 565 million cubic feet of natural gas (525 million cubic feet).

Exploration and development drilling totalled 22 wells, mainly in New Mexico, which resulted in seven oil wells, one gas well and 14 dry holes.

Proved and probable reserves in North America totalled 4,822,000 barrels of crude oil and natural-gas liquids and 9,407 million cubic feet of natural gas. The terms of the production-sharing contract with Pertamina require that the Indonesian reserves be kept confidential.

The joint venture in Indonesia holds a concession currently totalling 550,000 acres. Six oil fields have been discovered and developed on this property to date, including the Cenderawasih field which was discovered and placed on production in 1976. Two other exploratory wells drilled in 1976 recovered substantial oil and gas shows but they are not considered commercial at this time.

The installation of artificial lift equipment and power-generating facilities in all producing wells should be completed during the second quarter of 1977. One drilling rig will be used for continuous development of existing fields through 1977. A second rig will be utilized for continuous exploration.

The six oil fields produced 27,700,000 barrels of crude oil (75,700 barrels-per-day average) in 1976, compared with 22,975,000 barrels (63,000 barrels-per-day average) in 1975. Trend's net share of production in 1976 increased to 3,600,000 barrels (3,074,000 barrels). While production from the Indonesian project increased appreciably, earnings declined as a result of the supplementary payment referred to in the Francana text which had the effect of imposing, as of January 1, 1976, the terms of the contract modification described earlier.

Trend continues to hold interests in an 18.5-million-acre prospecting permit in Paraguay and drilling may commence this year. Trend plans to participate in drilling a well offshore Turkey during 1977. In addition, an active exploration and development program is planned in the U.S.

Canadian Merrill Ltd.

Gross oil and gas revenue for the fiscal year ended June 30, 1976, totalled $10,552,000 ($4,656,000). Cash flow increased to $3,550,000 ($1,143,000) and net income was $1,987,000 ($495,000).

Gas production increased to 9,500 million cubic feet from 7,070 million cubic feet. Oil production increased to 225,000 barrels from 181,000 barrels.

Total proved and probable reserves at June 30, 1976, were estimated at 290 billion cubic feet of gas and 2,081,000 barrels of oil. Merrill's exploration and development drilling program in the 1976 fiscal year resulted in a participation in 21 gas wells, one oil well and 20 dry holes.

In the six months ended December 31, 1976, gross oil and gas revenue totalled $7,854,000 ($4,163,000). Cash flow was $3,307,000 ($1,157,000). Net income for the six months was $1,887,000 ($450,000).

During the six-month period gas production amounted to 5,910 million cubic feet (4,190 million cubic feet) and oil production was 129,300 barrels (113,300 barrels). A 25% increase in gas production is expected in 1977 as new plant facilities are completed; oil production is expected to increase by 15% as a result of current development and exploration programs.

Merrill participated in drilling 28 gas wells, three oil wells and six dry holes in the six months ended December 31, 1976.

During the fiscal year ended June 30, 1976, Merrill sold all the assets of its well-servicing, equipment sales and rentals subsidiaries and realized approximately $7.3 million from these sales.

Checking seismic data in Indonesian oilfield

Hudson Bay Mining and Smelting Co., Limited

Consolidated statement of financial position

As at December 31, 1976 and 1975

The accompanying notes are an integral part of the financial statements.

	1976	1975
	(in thousands)	
Current assets:		
Cash and short-term securities	$ 48,330	$ 16,769
Accounts receivable	48,916	51,721
Inventories – metals and metal products	33,941	39,339
– fertilizers and chemicals	22,777	22,865
Total current assets	153,964	130,694
Deduct:		
Current liabilities:		
Accounts payable and accrued liabilities	50,549	46,269
Dividend payable	2,020	1,988
Loans from associated company	207	1,690
Income and other taxes payable	6,888	3,832
Notes payable	6,000	15,091
Current portion of long-term debt	2,542	3,118
Total current liabilities	68,206	71,988
Working capital	85,758	58,706
Add:		
Marketable securities – at cost (market value 1976 – $1,761,000; 1975 – $1,438,000)	2,541	2,541
Investment in joint venture – at equity value	1,116	1,285
Investment in and advances to partnership (Note 3)	7,814	1,881
Investment in other companies (Note 4)	42,059	68,133
Property, plant and equipment (Note 5)	203,925	254,797
Other assets:		
Unamortized mine development expenditures	42,938	38,386
Materials and supplies – at cost	10,978	10,821
Sundry assets and deferred charges – at cost	8,547	9,232
	62,463	58,439
Capital employed	405,676	445,782
Deduct:		
Long-term debt (Note 6)	93,216	86,425
Deferred income taxes	37,578	35,082
Minority interest in subsidiaries	71,056	106,957
	201,850	228,464
Shareholders' investment	$203,826	$217,318
Investment represented by:		
Capital stock (Notes 8 and 12)	$ 71,247	$ 68,442
Retained earnings	132,579	148,876
Total shareholders' investment	$203,826	$217,318

Approved by the Board of Directors

Director: H. R. Fraser

Director: E. P. Gush

Hudson Bay Mining and Smelting Co., Limited

Consolidated statement of earnings

For the years ended December 31, 1976 and 1975

The accompanying notes are an integral part of the financial statements.

	1976	1975
	(in thousands)	
Revenue:		
Sales of product, less freight and selling expenses	$343,647	$259,634
Costs and expenses:		
Cost of sales	222,487	153,399
Depreciation and depletion	38,505	24,637
Amortization of mine development expenditures	7,935	6,806
Exploration expenses	2,881	3,222
General administrative expenses	10,242	7,769
Interest (Note 6)	10,620	6,723
	292,670	202,556
Earnings before taxes and other income	50,977	57,078
Other income (Note 10)	3,831	4,112
Earnings before taxes	54,808	61,190
Income taxes, mining taxes and royalties:		
Mining taxes and royalties	12,710	9,620
Income taxes	36,494	27,005
	49,204	36,625
Earnings from operations	5,604	24,565
Other deductions:		
Provision for future write-offs of investments	1,003	2,185
Minority interest in earnings of subsidiaries	4,006	11,894
	5,009	14,079
	595	10,486
Equity in earnings of associated companies	2,224	4,285
Earnings before extraordinary items	2,819	14,771
Extraordinary items (Note 11)	11,098	—
Net earnings (loss) for the year	$ (8,279)	$ 14,771
Earnings (loss) per share (Note 15):		
Before extraordinary items	$ 0.28	$ 1.49
After extraordinary items	$ (0.83)	$ 1.49

Consolidated statement of retained earnings

For the years ended December 31, 1976 and 1975

	1976	1975
Retained earnings at beginning of the year (Note 15)	$148,876	$148,023
Net earnings (loss) for the year	(8,279)	14,771
	140,597	162,794
Dividends	8,018	13,918
Retained earnings at end of the year	$132,579	$148,876

Hudson Bay Mining and Smelting Co., Limited

Consolidated statement of changes in financial position

For the years ended December 31, 1976 and 1975

The accompanying notes are an integral part of the financial statements.

	1976	1975
	(in thousands)	
Funds provided:		
Operations:		
Earnings from operations	$ 5,604	$ 24,565
Depreciation, depletion and amortization of mine development expenditures	46,440	31,443
Deferred income taxes	3,599	5,360
Share of earnings of joint venture	(503)	(112)
	55,140	61,256
Dividends from associated companies	675	799
Cash distribution from joint venture	672	450
	56,487	62,505
Proceeds from long-term debt	9,333	61,033
Net proceeds from sale of investment in Western Decalta Petroleum Limited	34,811	—
Realization of other investments	1,740	1,534
Issue of shares	2,805	—
Working capital of subsidiary in excess of cost of acquisition (Note 9)	—	6,027
Decrease in sundry assets	692	1,540
	105,868	132,639
Funds applied:		
Dividends	8,018	13,918
Dividends paid by subsidiaries to minority interests	4,083	1,771
Investment in partnership	5,933	1,881
Investment in other companies	11,321	24,141
Additions to property, plant and equipment	34,275	37,125
Mine development expenditures	12,487	10,074
Reduction of long-term debt	2,542	3,118
Increase in materials and supplies	157	1,633
	78,816	93,661
Increase in working capital (Note 13)	27,052	38,978
Working capital at beginning of the year	58,706	19,728
Working capital at end of the year	$ 85,758	$ 58,706

Hudson Bay Mining and Smelting Co., Limited

Notes to the consolidated financial statements December 31, 1976 and 1975

1. Summary of significant accounting policies

Generally accepted accounting principles:

The consolidated financial statements are prepared in conformity with generally accepted accounting principles as established in Canada, which conform in all material respects with those established in the United States, except as explained in Note 15.

Principles of consolidation:

The consolidated financial statements include the accounts of Hudson Bay Mining and Smelting Co., Limited and all companies more than 50% owned. In addition, the Company follows the equity method of accounting for its interest in associated companies in which it, together with other associated companies, owns from 20% to 50% of the common shares.

As explained in Note 9, the Company acquired an additional interest in Terra Chemicals International, Inc. as of July 1, 1975, which resulted in this company becoming a subsidiary and being included on a consolidated basis from that date. Prior to that date, this investment was accounted for by the equity method.

Foreign currency translation:

Foreign currencies have been translated into Canadian dollars as follows: revenue, costs and expenses of foreign subsidiaries at the average rates of exchange for the period; noncurrent assets (including depreciation, depletion and amortization thereof) and noncurrent liabilities at rates in effect at dates of transactions; current assets and liabilities at rates in effect at the end of the year. Gains and losses on currency translations are included in the consolidated statement of earnings.

Inventories, materials and supplies:

Inventories of base metals, fertilizers and chemicals and all other saleable products are valued at the lower of cost or estimated net realizable value; base-metal byproducts are valued at estimated net realizable value. Materials and supplies are valued at cost. Cost is determined on the first-in, first-out basis, except the inventories of a subsidiary, Terra Chemicals International, Inc., which are valued on the last-in, first-out basis and which represent substantially all of the inventories of fertilizers and chemicals.

Property, plant and equipment:

Exploration costs with respect to mines operating or in the development stage are capitalized as mineral properties; all other mineral exploration costs are written off to expense as incurred. Oil and gas properties are accounted for on the full-cost basis whereby all costs relating to the exploration for and the development of oil and gas resources are capitalized whether productive or nonproductive.

Expenditures for plant and equipment additions, major replacements and improvements are capitalized in the property accounts; the cost of maintenance and repairs is charged to operating expense as incurred.

Depreciation and depletion:

Depreciation of base-metal plant and equipment and depletion of oil and gas properties are charged to operations by the unit-of-production method based on estimated recoverable reserves. Depreciation of other plant and equipment is charged to operations generally on a straight-line basis over their estimated useful lives.

Amortization of mine development expenditures:

Mine development expenditures are charged to operations on a unit-of-production method based on estimated recoverable reserves.

Deferred income taxes:

Deferred income taxes represent tax reductions for expenditures on mine development, oil and gas and other properties, cost of participation in certain mining companies, and depreciation deducted in the determination of taxable income but not yet charged to earnings.

Indonesian income taxes are determined under contract with the government and generally allow for deduction of all costs incurred, although certain of these costs are capitalized and amortized for financial reporting purposes. Deferred Indonesian income taxes are not appropriate relative to these timing differences since additional future taxes will be met by increased allocations under the production-sharing contract.

2. Subsequent event

On March 7, 1977, the Company agreed in principle to sell all of the assets, other than working capital, of its Sylvite of Canada potash division to the Potash Corporation of Saskatchewan, a provincial Crown corporation, for a cash consideration of $144,000,000. The sale, which is subject to the completion of a definitive purchase agreement, is expected to be completed in April, 1977.

The assets are carried in the accounts of the Company at a book value of approximately $57,000,000 as at December 31, 1976, and comprise the following:

	(in thousands)
Property, plant and equipment – at cost	$57,000
Accumulated depreciation and depletion	18,000
	39,000
Unamortized mine development expenditures	16,000
Sundry assets	2,000
	$57,000

While a portion of the proceeds of the sale will be subject to income taxes, the aggregate amount and the timing of the payment of such taxes are not determinable at this time.

3. Investment in and advances to partnership

During 1976, a subsidiary, Terra Chemicals International, Inc., entered into a partnership (Oklahoma Nitrogen Co.) for construction and operation of a 1,200-ton-per-day ammonia production facility in which Terra has a 25% interest.

The facility is expected to cost approximately U.S. $120,000,000 of which U.S. $30,000,000 will be provided through partner contributions and the balance, up to a maximum of U.S. $90,000,000, will be provided in the form of a construction loan by an insurance company and guaranteed by the partners in proportion to their respective interests in the partnership. It is expected that upon completion of the facility, which is scheduled for the fall of 1977, the construction loan

will be converted into 15-year notes secured by a first mortgage on the facility and the continuing guarantees of the partners.

At December 31, 1976, the partnership had assets of approximately U.S. $86,470,000 consisting principally of construction in progress financed in part by a construction loan of U.S. $30,000,000 (of which Terra is a 25% guarantor) and the balance through partner advances and equity contributions.

4. Investment in other companies

	1976	1975
	(in thousands)	
Associated companies – see below	**$46,405**	$66,826
Other – at cost:		
Quoted (market value 1976 – $72,000, 1975 – $97,000)	**591**	609
Unquoted	**8,412**	8,620
	55,408	76,055
Less provision for future write-offs	**13,349**	7,922
	$42,059	$68,133

The investment in associated companies comprises the following:

	% of Common Share Ownership		Underlying Equity in Net Assets	
	1976	1975	1976	1975
			(in thousands)	
Canadian Merrill Ltd.	**45.5**	29.1	**$ 9,451**	$ 6,263
Inspiration Consolidated Copper Company	**22.6**	18.0	**26,092**	21,297
Whitehorse Copper Mines Ltd.	**41.2**	20.6	**4,749**	2,259
Lytton Minerals Limited	**33.9**	33.9	**1,509**	1,513
Ambay Services Limited	**50.0**	50.0	**63**	47
Western Decalta Petroleum Limited	—	35.7	—	17,480
			$41,864	$48,859

The unamortized excess cost over the underlying equity in the net assets at the dates of acquisition, amounting to $4,541,000 (1975 – $17,967,000), is included in the investment in associated companies and is being written off against the Company's share of earnings therefrom, generally over a period of 20 years except for an amount of $2,920,000 relative to the Company's investment in Lytton Minerals Limited which has been fully provided for in the current year, as explained in Note 11.

The following significant transactions have taken place in these investments:

(a) The Company increased its investment in Canadian Merrill Ltd. from 29.1% to 45.5%. The largest portion of this increase resulted from a share exchange between the Company and a senior officer of the Company.

The percentage of common share ownership in Canadian Merrill Ltd. may be increased, at the Company's option, to approximately 59.4% through the conversion of debt securities held.

(b) In 1975, the Company acquired an 18% interest in Inspiration Consolidated Copper Company, a United States integrated natural-resources company, for approximately $22,000,000 cash and during 1976 increased its interest to 22.6% for a further consideration of $5,147,000.

(c) The Company acquired an additional 20.6% interest in Whitehorse Copper Mines Ltd. from a wholly-owned subsidiary of Anglo American Corporation of Canada Limited for $1,361,000 cash.

In January, 1977, the Company disposed of its 1/6 interest in the Whitehorse Copper Mines Ltd. Joint Venture for $1,325,000 cash.

(d) The Company sold its entire investment in Western Decalta Petroleum Limited for approximately $37,846,000 cash. The investment consisted of common shares and convertible debt securities.

5. Property, plant and equipment

The following is a summary of property, plant and equipment at cost by major category:

	1976	1975
	(in thousands)	
Base metals	**$143,206**	$137,778
Fertilizers and chemicals:		
Potash division (Note 2)	**56,979**	53,823
Other	**66,536**	62,349
Oil and gas (Note 11)	**98,937**	145,188
	365,658	399,138
Less:		
Accumulated depreciation	**126,075**	110,242
Accumulated depletion (Note 11)	**35,658**	34,099
	161,733	144,341
	$203,925	$254,797

6. Long-term debt

Long-term debt comprises the following:

	1976	1975
	(in thousands)	
Hudson Bay Mining and Smelting Co., Limited:		
9% unsecured debentures due 1991	**$23,115**	$23,115
10½% unsecured debentures due 1995 (U.S. $50,000,000)	**50,764**	50,764
9% unsecured note payable (U.S. $4,800,000)	**4,936**	6,169
Francana Oil & Gas Ltd.:		
Bank production loans	**2,202**	2,778
Unsecured note payable (U.S. $1,333,000)	**1,308**	2,617
Terra Chemicals International, Inc.:		
Unsecured bank term loan (U.S. $4,000,000)	**4,100**	4,100
9⅝% unsecured notes payable (U.S. $9,000,000)	**9,082**	—
Other (U.S. $256,200)	**251**	—
	95,758	89,543
Current portion due within one year included in current liabilities	**2,542**	3,118
	$93,216	$86,425

(a) Under the trust indenture covering the 9% unsecured debentures, sinking fund payments sufficient to retire $800,000 of principal amount each year from 1977 to 1990, inclusive, are required. The Company has the option to redeem the debentures at prices ranging downward from 106.25% currently to 100% in 1988 and thereafter. Debentures redeemed through the operations of the sinking fund are callable at par.

(b) Under the trust indenture covering the 10½% unsecured debentures, sinking fund payments sufficient to retire U.S. $3,330,000 of principal amount each year from 1981 to 1994, inclusive, are required. The Company has the option to redeem the debentures at prices ranging downward from 109.8% currently to 100% in 1990 and thereafter. Debentures redeemed through the operations of the sinking fund are callable at par.

(c) The balance of the 9% unsecured note payable is repayable in four annual instalments of U.S. $1,200,000.

(d) The bank production loan is repayable in principal instalments of $35,700 per month commencing in March, 1978; there are no principal payments required during 1977; in 1976 the loan was repayable in monthly instalments of $48,000. The loan is secured by an assignment of interests in certain producing properties and bears interest at approximately bank prime rate.

(e) The unsecured note payable is interest-free and repayable in equal annual instalments of U.S. $1,333,000.

(f) The unsecured bank term loan of Terra Chemicals International, Inc. is repayable in six equal semi-annual instalments of U.S. $667,000 commencing in 1978 and bears interest at ½ of 1% above the bank prime rate.

(g) The 9⅝% unsecured notes payable of Terra Chemicals International, Inc. are repayable in equal annual instalments of $1,000,000 commencing in 1980.

Interest and related expenses on long-term debt amounted to $8,183,000 in 1976 and $3,221,000 in 1975.

After allowing for prepayments, sinking fund and principal payments over the next five years amount to $2,542,000 in 1977; $3,213,000 in 1978; $3,544,000 in 1979; $4,838,000 in 1980 and $5,617,000 in 1981.

7. Contingent liabilities

During 1973, an action was brought alleging infringement by the Company with respect to certain patents relating to the processing of potash. In the opinion of the Company and its counsel, the patents are not infringed and accordingly the Company has a good defence to the action on the merits.

The Company and certain subsidiaries are contingently liable as guarantors for the indebtedness of an associated company and discounted notes subject to recourse aggregating $3,708,000 at December 31, 1976.

8. Capital stock

The authorized capital of the Company comprises 15,000,000 Class "A" and 15,000,000 Class "B" convertible common shares without par value.

The Class "A" and Class "B" shares are freely interconvertible at any time, on a one-for-one basis, at the option of the shareholder and rank equally in all respects, except that it is the Company's intention to pay tax-deferred dividends to the Class "B" shareholders out of 1971 capital surplus, as defined in the Canadian Income Tax Act. For Canadian income tax purposes, tax-deferred dividends are not taxable when received by the shareholder, but reduce the adjusted cost base of his shares for capital gains determination.

As at December 31, 1976, there were issued and fully paid 10,101,739 shares (1975 – 9,941,658 shares) consisting of 5,085,247 Class "A" shares and 5,016,492 Class "B" shares.

During the year, 1,475 shares were issued for $28,984 cash under the Company's share option plan (Note 12). In addition, 158,606 shares were issued in exchange for 261,234 shares of Canadian Merrill Ltd., most of which were held by a senior officer of the Company. This share exchange, valued at $2,775,605, was based on the closing price of each stock on the Toronto Stock Exchange on September 1, 1976.

9. Acquisition of subsidiary

Effective July 1, 1975, the Company acquired 7% cumulative preferred shares with a par value of U.S. $6,000,000 and a further equity interest of approximately 21% in an associated company, Terra Chemicals International, Inc. (Terra), a manufacturer and distributor of fertilizers and chemicals in the midwestern United States, for $21,706,000. This acquisition combined with the Company's previous interest resulted in Terra becoming a subsidiary of the Company. The consideration was satisfied by a U.S. $6,000,000 9% note repayable in five equal annual instalments and the balance in cash.

This acquisition has been accounted for by the purchase method and Terra's accounts have been consolidated with those of the Company from the effective date of acquisition. Prior to that date, this investment was accounted for by the equity method.

The following is a summary of the noncurrent assets and liabilities at the effective date of acquisition:

	(in thousands)
Property, plant and equipment less accumulated depreciation and depletion	$ 36,097
Other assets	3,330
Noncurrent liabilities including minority interest	(28,417)
	11,010
Investment at effective date of acquisition (including equity in earnings)	17,037
Working capital acquired in excess of cost of acquisition	$ 6,027

The excess of cost of the investment over the underlying equity in the net assets at the effective date of acquisition of $7,802,000 has been ascribed to property, plant and equipment. The excess is being amortized against earnings on a straight-line basis over a period of 10 years.

10. Other income

This amount comprises the following:

	1976	1975
	(in thousands)	
Share of earnings of joint venture	**$ 503**	$ 112
Interest income	**2,960**	2,621
Miscellaneous income	**368**	1,379
	$3,831	$4,112

11. Extraordinary items

Extraordinary items consist of the following:

	(in thousands)
Write-down of investment in Indonesia, less minority interest	$10,806
Provision for possible decline in value of investment in Lytton Minerals Limited, less applicable income taxes	3,327
	14,133
Gain on disposal of investment in Western Decalta Petroleum Limited, less income taxes	3,035
	$11,098

(a) In 1974, the Company, through a subsidiary of Francana Oil & Gas Ltd. (55% owned), purchased approximately 70% of the shares of Trend Exploration Limited which represented substantially all of the shares of that company not already owned by Francana. Trend is the operator for, and has a significant interest in, a joint venture involved in petroleum exploration, development and production in Indonesia. The crude oil production is shared under the terms of a production-sharing contract with Pertamina (the national oil company of Indonesia). The excess of the cost of the investment in Trend over the underlying equity in the net assets at the various dates of acquisition of the shares was ascribed to petroleum properties. This excess has been amortized by the unit-of-production method based on Trend's share of the estimated recoverable reserves of the properties to which it related.

During the year, the production-sharing contract with Pertamina was modified. The amendments, effective January 1, 1977, require contractors to recover their capital investment over a period of years rather than currently and significantly increase Pertamina's share of production. In addition, contractors were required to make special payments to Pertamina with respect to 1976 production. The special payment by Trend of $8,620,000 was charged to revenue and reduced earnings, after minority interest, by $2,700,000.

Because of the changed economics resulting from the contract amendments and certain production problems, the Company has reassessed its interest in Indonesia. As a consequence, the estimated recoverable oil reserves have been significantly reduced resulting in an increase in depletion and depreciation charges. In addition, having revalued its investment, the Company has written off the unamortized excess of the cost of its investment in Trend over its equity in the underlying net assets as at December 31, 1976. The resulting extraordinary charge to earnings of $10,806,000 comprises the following:

	(in thousands)
Excess cost originally ascribed to petroleum properties	$66,237
Less related accumulated depletion	19,606
Unamortized cost	46,631
Minority interest therein	35,825
	$10,806

(b) The Company, through its investment in Lytton Minerals Limited, has an interest in certain mining properties in Mexico. The development of these properties, which represent virtually all of Lytton's assets, has been delayed pending a reappraisal of the economics of the project and the finding of a suitable Mexican partner.

In view of the delays and uncertainties which still exist, full provision has been made for possible decline in value of the investment in Lytton Minerals Limited.

12. Share option plans

Under the Company's Share Option Plans for full-time officers and key employees, 368,000 unissued shares were reserved for granting of options at prices not less than 95% of the market value (full market value in the case of United States citizens) on the day the option is granted.

No options were granted during 1976 or 1975. Options on 1,475 shares were exercised during 1976 at $19.65 per share (no options were exercised in 1975). Options on 3,510 shares terminated in 1976 (1975 – 8,610 shares).

As of December 31, 1976, 224,835 shares were available for future grants and 65,865 shares (15,735 for officers) granted December 14, 1972, were subject to outstanding options at $19.65 per share until December 13, 1977.

13. Analysis of changes in working capital

	1976	1975
	(in thousands)	
Increase (decrease) in current assets:		
Cash and short-term securities	**$31,561**	$ (9,873)
Accounts receivable	**(2,805)**	27,328
Inventories:		
Metals and metal products	**(5,398)**	12,880
Fertilizers and chemicals	**(88)**	21,575
	23,270	51,910
(Increase) decrease in current liabilities:		
Accounts payable and accrued liabilities	**(4,280)**	(12,003)
Dividend payable	**(32)**	1,989
Loans from associated company	**1,483**	5,254
Income and other taxes payable	**(3,056)**	7,657
Notes payable	**9,091**	(15,091)
Current portion of long-term debt	**576**	(738)
	3,782	(12,932)
Increase in working capital	**$27,052**	$38,978

14. Pension plans

The unfunded past service cost with respect to the Company's pension plans was approximately $16,000,000 as at December 31, 1976 (1975 – $11,600,000), including vested benefits of approximately $11,000,000 (1975 – $8,000,000) and is being funded and amortized over the next 15 years as recommended by the Company's actuarial consultants.

15. Adjustment for change in inventory valuation

Prior to 1975, the Company followed the practice of valuing its inventories of copper and zinc at estimated net realizable value (after making provision for all costs relating to the sale of these metals) and recog-

nized the revenue from metal sales at the time of production rather than at the time of shipment to customers.

In 1975, in order to provide a more appropriate matching of revenue and cost of production, the Company adopted the lower of cost or estimated net realizable value for valuing its copper and zinc inventories and it began recognizing revenue from these metal sales at time of shipment to customers rather than at the time of production. Inventories of precious metals and cadmium, which are byproducts of base-metal production, continue to be valued at estimated net realizable value.

The Company has adopted this practice on a retroactive basis and the balance of retained earnings at January 1, 1975, has been restated to reflect a reduction of $832,000 representing the cumulative adjustment, net of related income taxes, required in respect of prior periods.

Generally accepted accounting principles in the United States require the cumulative effect of the change in inventory valuation on prior years' earnings to be reflected as a special charge in the statement of earnings of the current year, rather than as a restatement of prior years' earnings. The effect of this treatment would have reduced net earnings for the year ended December 31, 1975, by $832,000 (8¢ per share).

16. Remuneration of directors and officers

As at December 31, 1976, the Company had 12 directors and 19 officers (20 officers in 1975), three of the officers are also directors. The aggregate remuneration paid to the directors and officers, as such, was as follows:

	1976	1975
Directors	$ **60,000**	$ 65,000
Officers	**1,247,000**	1,191,000

17. Anti-inflation legislation

Certain of the Company's operations in Canada are subject to the Anti-Inflation Act which provides for the restraint of profit margins, prices, dividends and compensation.

Under the present legislation, the Company is not permitted to pay dividends in excess of $1.72 per share in the twelve months ending October 13, 1977. Regulations relating to the restriction of dividends subsequent to that date have not yet been issued by the Government.

18. Replacement cost information

The Company, like other companies and individuals, is affected by inflation. Its most direct effect is to increase the Company's costs of operation. The Company establishes the sales prices of its products primarily on the basis of competitive market conditions, rather than directly on costs incurred. Consequently, the impact on the Company's earnings of increased costs arising from inflation is not readily determinable.

The Securities and Exchange Commission of the United States now requires certain registered companies to include in their annual Form 10-K filing certain information concerning the estimated replacement cost of their productive facilities and inventories, and concerning depreciation and cost of products sold computed on the basis of such replacement cost. Having anticipated the problems involved in obtaining such information, a one-year deferral of this requirement has been granted with respect to certain assets, including the mineral resource assets of companies in the extractive industries.

Consequently, the Company has included in its Form 10-K (a copy of which is available upon request) information with respect to the estimated replacement cost of its inventories as of December 31, 1976, and the effect of this replacement cost on the cost of sales. The Company has not yet determined the estimated replacement cost of its productive facilities, substantially all of which are related, directly or indirectly, to its mineral resource assets.

Auditors' Report

To the Shareholders of
Hudson Bay Mining and
Smelting Co., Limited:

We have examined the consolidated statement of financial position of Hudson Bay Mining and Smelting Co., Limited and subsidiary companies as at December 31, 1976 and 1975, and the consolidated statements of earnings, retained earnings and changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine financial statements of a subsidiary which has been consolidated or of certain investments which have been accounted for using the equity method of accounting. The earnings from these entities reduced the consolidated loss by 47% in 1976 and comprised 51% of the consolidated net earnings in 1975; the sales of the subsidiary comprised 26% and 13% of the consolidated sales, and its assets comprised 19% and 15% of the consolidated assets for the years 1976 and 1975, respectively. The financial statements with respect to the aforementioned subsidiary and investments were reported upon by other auditors and our opinion, insofar as it relates to the amounts included for such entities, is based solely upon the reports of the other auditors.

In our opinion, based upon our examination and the reports of other auditors, these consolidated financial statements present fairly the financial position of the companies as at December 31, 1976 and 1975, and the results of their operations and the changes in their financial position for the years then ended in accordance with generally accepted accounting principles applied on a consistent basis.

Deloitte, Haskins & Sells
Chartered Accountants

Toronto, Canada
February 18, 1977
(March 7, 1977, with
respect to Note 2)

Financial review and Management's discussion and analysis of the consolidated statement of earnings

Earnings for 1976 before extraordinary items amounted to $2,819,000 compared with 1975 net earnings of $14,771,000. After extraordinary items, a loss of $8,279,000 was incurred for 1976 (see Note 11 to the Consolidated Financial Statements for details).

The reduction in earnings is attributed to the following reasons: reduced oil revenue resulting from the changes in the Indonesian production-sharing contract; increased depreciation and depletion charges due to the reassessment of the Indonesian oil reserves; the continuing weakness in metal prices during 1976; and significant increases in operating costs.

Dividends declared for 1976 totalled $8,018,000, or $.80 a share, compared with $13,918,000, or $1.40 per share, for 1975.

Working capital increased by $27,052,000 during 1976, from $58,706,000 at the end of 1975 to $85,758,000 at the end of 1976. This is primarily due to the sale of the investment in Western Decalta Petroleum Limited.

Significant increases in sales and expenses which occurred in 1976 and 1975 are largely due to the consolidation of Terra Chemicals International, Inc. accounts, commencing on July 1, 1975. Prior to this date, the Company's interest in the earnings of Terra was accounted for by the equity method and therefore equity earnings figures in both years have been affected accordingly. Details of significant changes outlined below exclude the effect of the Terra consolidation.

Dividends and market price ranges, by quarters

			Market Range							
			Toronto Stock Exchange(2) (Principal market, Cdn $)				New York Stock Exchange (U.S. $)			
	Dividends(1)		High	Low	High	Low	High	Low	High	Low
1976	A	B	—A—		—B—		—A—		—B—	
1st	20¢	20¢	22	15⅛	21⅝	15⅜	22¼	14⅞	22	14⅞
2nd	20¢	20¢	22	18⅝	21⅜	19	22⅜	19	22	19
3rd	20¢	20¢	19¾	17⅜	19¼	17½	20⅛	17	20	18⅛
4th	20¢	20¢	19⅜	13½	16½	13⅞	19	14	19	14⅞
1975										
1st	40¢	40¢	18¼	13⅛	17¾	14½	17¾	13⅜	17½	13¾
2nd	40¢	40¢	20	17½	19⅝	18⅛	19¼	17⅜	19⅝	17¼
3rd	40¢	40¢	21½	17	20⅛	17⅝	21	16½	20	16
4th	20¢	20¢	18¾	14¾	18¼	15¼	18¼	14½	17¼	14¼

(1) The Class A and Class B shares are freely interconvertible at any time, on a one-for-one basis, and rank equally in all respects, except that Class B dividends are tax-deferred.

(2) The Company's shares are traded on the Montreal, New York and Toronto Stock Exchanges.

Investments. During the year, the Company increased its equity interest in the following companies: Canadian Merrill Ltd., from 29.1% to 45.5%; Inspiration Consolidated Copper Company, 18% to 22.6%; Whitehorse Copper Mines Ltd., 20.6% to 41.2%. The cost of acquiring additional shares in these companies amounted to $10,312,000.

In 1976, the Company sold its entire investment in Western Decalta for approximately $37,846,000. The investment consisted of common shares and convertible debt securities.

Capital expenditures during 1976 totalled $46,762,000, a decrease of $437,000 from expenditures in 1975. A total of $20,759,000 was spent by Francana Oil & Gas Ltd. and Trend Exploration Limited, primarily in Indonesia. Approximately $17,786,000 was spent in the Flin Flon-Snow Lake area on further modernization, environmental programs and on underground mine development. Capital expenditures in the fertilizer and chemical division totalled $8,009,000.

Net sales from our Flin Flon operations increased by approximately $20,410,000 during 1976 after a substantial decrease in 1975. The increase was the direct result of an increase in copper deliveries of 9,406,000 lbs. and an increase of 35,105,000 lbs. in zinc deliveries. Revenue reductions in 1975 were attributable mainly to lower copper prices and sharply reduced zinc sales due to poor market conditions.

Cost of sales increases in both 1976 and 1975 occurred primarily in our base-metal operations, and resulted from continued substantial increases in labor and material.

Exploration expenditures decreased in both 1976 and 1975 primarily because of reduced activity in Manitoba and Saskatchewan.

Increased general administration expenses in 1975 were due to increased staff requirements and related costs at Head Office.

Interest expense increased substantially during 1976 and 1975, mainly due to increased borrowings required to finance major investments and capital expenditures.

Income taxes, mining taxes and royalties. The higher mining taxes and royalties in 1976 are due to increased Saskatchewan Government taxes on our potash operation. Lower income taxes were incurred in 1976 and 1975 by both the base-metal and potash operation due to decreased earnings.

Comparative financial analysis

	1976	1975
	(in thousands)	
Revenue	**$343,647**	$259,634
Earnings before taxes, minority interest and extraordinary items	**56,029**	63,290
Funds available	**164,574**	152,367
Use of funds	**78,816**	93,661

Supplementary financial information
(in thousands)

	1976	1975	1974	1973	1972
Summary of operations					
Net sales	$343,647	$259,634	$217,210	$162,572	$101,790
Equity earnings	2,224	4,285	9,129	1,566	—
Other income	3,831	4,112	5,529	5,360	2,784
	349,702	268,031	231,868	169,498	104,574
Cost and expenses	292,670	202,556	148,118	112,019	89,618
Taxes and royalties	49,204	36,625	33,939	14,184	3,077
Other deductions	5,009	14,079	4,843	2,402	270
	346,883	253,260	186,900	128,605	92,965
Earnings before extraordinary items	2,819	14,771	44,968	40,893	11,609
Extraordinary items (Note 11)	(11,098)	—	—	2,704	(8,518)
Net earnings (loss)	$ (8,279)	$ 14,771	$ 44,968	$ 43,597	$ 3,091
Other financial data					
Capital expenditures	$ 46,762	$ 47,199	$ 43,639	$ 18,177	$ 12,282
Investment expenditures	11,321	24,141	86,940	41,137	3,160
Working capital	85,758	58,706	19,728	42,862	36,089
Total assets	473,882	517,770	402,691	299,076	211,008
Capital employed	405,676	445,782	343,635	242,120	188,837
Shareholders' investment	203,826	217,318	216,465	187,398	140,554
Dividends	8,018	13,918	15,907	19,253	7,233
Earnings (loss) per share	(.83)	1.49	4.52	4.67	.34
Dividends per share	.80	1.40	1.60	2.00	.80
Lines of business information					
Net sales:					
Base metals	$154,507	$130,914	$165,005	$138,434	$ 88,145
Fertilizers and chemicals	127,551	73,548	33,782	20,132	9,760
Oil and gas	61,589	55,172	18,423	4,006	3,885
	$343,647	$259,634	$217,210	$162,572	$101,790
Earnings (loss) before taxes, minority interest and extraordinary items:					
Base metals	$ (8,626)	$ (1,124)	$ 43,069	$ 46,115	$ 13,934
Fertilizers and chemicals	34,733	31,571	25,889	7,559	(223)
Oil and gas	29,922	32,843	14,252	1,955	1,245
	$ 56,029	$ 63,290	$ 83,210	$ 55,629	$ 14,956

Principal addresses

Mine offices
Hudson Bay Mining and Smelting Co., Limited
P.O. Box 1500
Flin Flon, Manitoba R8A 1N9
General manager: S.W. Harapiak

Sylvite of Canada Division of Hudson Bay Mining and Smelting Co., Limited
P.O. Box 270, Rocanville, Saskatchewan S0A 3L0
General manager: F.J. Greeves

Exploration offices
Hudson Bay Exploration and Development Company Limited
P.O. Box 28, Toronto-Dominion Centre,
Toronto, Ontario M5K 1B8

Unit 52
2 Thorncliffe Park Drive, Toronto, Ontario M4H 1H2
Manager, Eastern exploration: P.L. Martin

Flin Flon, Manitoba R8A 1N9
Manager, Central exploration: J.G. Bragg

P.O. Box 49085-555 Burrard St., Bentall Centre
Tower No. 2
Vancouver, British Columbia V7X 1G6
Manager, Western exploration: R.A. Freberg

Subsidiary companies
Francana Minerals Ltd.
670 Bank of Canada Bldg., Regina,
Saskatchewan S4P 0M8

Francana Oil & Gas Ltd.
630-6th Ave. S.W.,
Calgary, Alberta T2P 0S8

Hudson Bay Diecastings Limited
P.O. Box 1050, Brampton, Ontario L6T 1E9

Terra Chemicals International, Inc.
P.O. Box 1828
Sioux City, Iowa 51102

Zochem Limited
P.O. Box 1120, Brampton, Ontario L6V 2L8

Operating properties, subsidiaries and major holdings (*Ownership is 100% unless indicated otherwise.*)

METALS

Canada
(Flin Flon-Snow Lake area)
- Anderson Lake Mine
- Centennial Mine
- Chisel Lake Mine
- Flin Flon Mine and metallurgical plants
- Ghost Lake Mine
- Osborne Lake Mine
- Stall Lake Mine
- Westarm Mine
- White Lake Mine

Lytton Minerals Limited (33.9%)
Stikine Copper Limited (34.5%)
Whitehorse Copper Mines Ltd. (41.2%)

United States
Inspiration Consolidated Copper Company (22.6%)

Mexico
Compania Cuprifera La Verde, S.A. (Lytton holds 47.5%)

Service companies
Beaver Exploration Company
Churchill River Power Company Limited
Hudson Bay Air Transport Limited
Hudson Bay Exploration and Development Company Limited
Minsearch Surveys Limited (35.3%)
Northern Power Limited

OIL AND GAS

Canada
Canadian Merrill Ltd. (45.5%)*
Francana Oil & Gas Ltd. (54.9%)

*Subsequently increased to 49.2%

United States
Trend Exploration Limited
(Francana Oil & Gas holds 56.8%)

Indonesia
Petromer Trend Division of Trend Exploration Limited

Service companies
Barringer Hydrocarbons Limited (15%)

FERTILIZERS AND CHEMICALS

Canada
Francana Minerals Ltd. (60%)
Sodium Sulphate (Saskatchewan) Ltd.
(Francana Minerals holds 100%)
Sylvite of Canada Division

United States
Sylvite Sales Inc.
Terra Chemicals International, Inc. (50.6%)

MANUFACTURING

Canada
Hudson Bay Diecastings Limited
Zochem Limited

Directors and Officers

Directors

*H.R. Fraser, Toronto
Chairman, Hudson Bay Mining

†J.L. Carpenter, Toronto
Executive Vice-President, Hudson Bay Mining

*H.P. Crawford, Q.C., Toronto
A Senior Partner, Osler, Hoskin & Harcourt
Barristers and solicitors

*E.P. Gush, Toronto
President, Hudson Bay Mining

M.B. Hofmeyr, London
Managing Director, Charter Consolidated Limited
A mining-finance house

R.H. Jones, Winnipeg
President and Chief Executive Officer,
The Investors Group
A financial holding company

*†A.T. Lambert, Toronto
Chairman and Chief Executive Officer,
The Toronto-Dominion Bank
A Canadian chartered bank

†H.C.F. Mockridge, Q.C., Toronto
A Senior Partner, Osler, Hoskin & Harcourt

*W.A. Morrice, Toronto
Former President, Hudson Bay Mining
Retired

G.W.H. Relly, Johannesburg
Executive Director, Anglo American Corporation of
South Africa Limited
A mining-finance house

A. Sweatman, Q.C., Winnipeg
Senior Partner, Thompson, Dorfman & Sweatman
Barristers and solicitors

J.D. Taylor, Q.C., Johannesburg
Manager, Anglo American Corporation of
South Africa Limited

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*Member of the Executive Committee

†Member of the Audit Committee

Officers

H.R. Fraser
Chairman

E.P. Gush
President

J.L. Carpenter
Executive Vice-President

A.M. Doull
Senior Vice-President – Finance

H. ReKunyk
Senior Vice-President – Petroleum

C.K. Taylor, Q.C.
Senior Vice-President, Secretary and General Counsel

J.S. Warick
Senior Vice-President – Operations

N.G. Ashby
Vice-President – Industrial Relations

R.B. Cairns
Vice-President – Exploration

K.S. Dalton
Vice-President – Finance

J. Debray
Vice-President – Petroleum

J.R.G. Sadler
Vice-President – Canadian Metals Division

Dr. C.L. Sarthou
Vice-President – Market Development

G.A.C. MacRae
Treasurer

S.R. Horne
Investment Manager

E.P. Haggarty
Comptroller

S.A. Hayward
Assistant Secretary and Assistant Treasurer

Miss S. Kozel
Assistant Secretary

P.H. Page
Assistant Treasurer

Hudson Bay Mining and Smelting Co., Limited

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Regina, Calgary, Vancouver.
Morgan Guaranty Trust Company
of New York – New York, N.Y.

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Montreal, Regina.
Crown Trust Company –
Toronto, Winnipeg, Calgary, Vancouver.
The Chase Manhattan Bank – New York, N.Y.

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Cover: Hudson Bay Mining's metallurgical and mining complex at Flin Flon.

effects of a planned reduction in production. Full production is scheduled to be resumed in August.

Terra Chemicals International, Inc., of Sioux City, Iowa, in which your Company holds a 51% equity interest, made a significant contribution to your Company's earnings for the first half of the year. Terra reported record revenues for the second quarter but earnings for the first six months were lower than for the comparable period of the previous year due to weakness in fertilizer prices.

On June 24, the Company announced the formation of a new Canadian Metals Division to rationalize its mining, manufacturing and marketing operations in metals and related products in Canada. The new division is responsible for mining and metallurgical operations in Manitoba and Saskatchewan, metal sales and purchases of concentrates, manufacture and sale of zinc oxide and zinc-base diecastings by two wholly owned subsidiaries, and the Company's participation in Whitehorse Copper Mines Limited.

During the quarter, the Company increased its equity interest in Inspiration Consolidated Copper Company, of Morristown, New Jersey, from about 18% to 22.44% by purchasing 144,540 common shares from private shareholders.

Francana Oil & Gas Ltd., of Calgary, in which your Company holds a 55% equity interest, reports that the cash flow and earnings of Trend Exploration Limited, of Denver, 57% held by Francana, will be materially and adversely affected by proposed changes in the oil production-sharing contract between Trend and the Indonesian Government.

The Indonesian Government has required a general modification of all production-sharing contracts, effective January 1, 1977, to increase the government's share of profits to 85% and to require the contractors to recover their capital investment over a period of years instead of in the year of expenditure. In addition, contractors will be required to provide a substantial special payment to the government in respect of 1976 production. The effect of these changes on the earnings of your Company from its investment in Francana is expected to be material although it cannot be precisely determined at this time (see Note 3 to the Consolidated Statement of Earnings).

The Indonesian Government has indicated that the revisions to the production-sharing contract will be made in a form that will allow Indonesian income taxes as a credit against United States income taxes payable.

Great Lakes Power Corporation, of Toronto, has announced that it will not be completing its purchase of your Company's 35.6% common share holdings in and debentures of Western Decalta Petroleum Ltd., of Calgary.

On July 30, Loram Co. Ltd., of Calgary, was granted an option exercisable on or before Aug. 30, 1976, to purchase your Company's interests in Western Decalta for $33,024,362. The option period may be extended until Dec. 6, 1976, for an additional option consideration of $3,100,000. The initial option consideration was $225,000.

Your Company has still not reached a decision with respect to the future of the La Verde copper project in Mexico. Meanwhile, a planned reduction in staff in Mexico City and in the field has been completed in order to reduce expenses.

On July 8, the Board of Directors declared a dividend of 20¢ per share for the second quarter of 1976. The dividend was paid on Aug. 6, 1976, to shareholders of record July 21.

August 9, 1976

W. A. Morrice
President

Hudson Bay Mining and Smelting Co., Limited

Interim Report
To Shareholders

6 Months
Ended June 30, 1976

Hudson Bay Mining and Smelting Co., Limited

Consolidated Statement of Earnings

	For the quarter ended June 30 1976	For the quarter ended June 30 1975(1)	For the six months ended June 30 1976	For the six months ended June 30 1975(1)
Net sales	**$125,725,000**	$ 61,501,000	**$194,564,000**	$107,480,000
Other income	**413,000**	379,000	**792,000**	1,146,000
	126,138,000	61,880,000	**195,356,000**	108,626,000
Cost of sales	**81,331,000**	35,457,000	**121,665,000**	60,088,000
Depreciation, depletion and amortization	**9,620,000**	7,226,000	**18,874,000**	13,051,000
General administrative	**2,631,000**	1,514,000	**5,044,000**	2,724,000
Interest	**2,730,000**	810,000	**5,305,000**	1,640,000
	96,312,000	45,007,000	**150,888,000**	77,503,000
Earnings before taxes and royalties	**29,826,000**	16,873,000	**44,468,000**	31,123,000
Taxes and royalties	**17,696,000**	11,141,000	**28,051,000**	17,316,000
Earnings from operations	**12,130,000**	5,732,000	**16,417,000**	13,807,000
Minority interest in earnings of subsidiaries	**7,005,000**	1,102,000	**10,245,000**	3,176,000
	5,125,000	4,630,000	**6,172,000**	10,631,000
Equity in earnings of associated companies	**1,332,000**	2,819,000	**1,095,000**	4,124,000
Earnings for the period	**$ 6,457,000**	$ 7,449,000	**$ 7,267,000**	$ 14,755,000
Shares outstanding	**9,943,133**	9,941,658	**9,943,133**	9,941,658
Earnings per share	**$ 0.65**	$ 0.75	**$ 0.73**	$ 1.48

(1) The earnings of Terra Chemicals International, Inc. prior to July, 1975, were included in equity in earnings of associated companies. Subsequent to that date the results of operations of Terra have been consolidated with those of the parent company.

(2) The financial information is stated in Canadian currency and is subject to year-end audit.

(3) Francana Oil & Gas Ltd.'s contribution to earnings amounted to approximately $3,000,000 for the six months ended June 30, 1976 (see reference to Francana in text of report To the Shareholders).

Consolidated Statement of Changes in Financial Position

For the Six Months ended June 30, 1976

Funds generated from operations	**$37,016,000**
Application of funds:	
Dividends	**1,988,000**
Dividends paid to minority interest by subsidiaries	**3,110,000**
Investment in other companies	**5,251,000**
Property, plant and equipment	**18,683,000**
Mine development expenditures	**5,857,000**
Reduction of long-term debt	**1,258,000**
Increase in other assets	**7,030,000**
	43,177,000
Decrease in working capital	**6,161,000**
Working capital at beginning of period	**58,706,000**
Working capital at end of period	**$52,545,000**

Consolidated Statement of Financial Position as at June 30, 1976

Current assets	**$120,643,000**
Current liabilities	**68,098,000**
Working capital	**52,545,000**
Investments	**78,507,000**
Property, plant and equipment	**258,756,000**
Unamortized mine development expenditures	**40,093,000**
Other assets	**28,552,000**
Capital employed	**458,453,000**
Deduct:	
Long-term debt	**85,167,000**
Deferred income taxes	**36,567,000**
Minority interest in subsidiaries	**114,093,000**
	235,827,000
Shareholders' investment	**$222,626,000**
Investment represented by:	
Capital stock	**$ 68,471,000**
Retained earnings	**154,155,000**
Total shareholders' investment	**$222,626,000**

To the Shareholders:

Net earnings for the first six months of 1976 (comparable figures for 1975 are shown in brackets) totalled $7,267,000 ($14,755,000). Earnings per share were 73¢ ($1.48). Total revenue amounted to $195,356,000 ($108,626,000).

Net earnings for the second quarter were $6,457,000 ($7,449,000). Earnings per share were 65¢ (75¢). Total revenue was $126,138,000 ($61,880,000).

As noted in the interim report for the first quarter, the Canadian price for copper was increased by 3.5¢ per lb. on April 22. A further increase on July 9, the third of the year, raised the domestic price of full plate electrolytic copper cathodes by 2.5¢ per lb., from 69.25¢ to 71.75¢.

In Canada, the price for crude oil was increased on July 1 by $1.05 per barrel, raising the average wellhead price to $9.05. The price for natural gas was raised by 15.5¢ per mcf which increased the average wellhead price to $1.06 per mcf on July 1 and on September 10 the price will be $1.12. Additional price increases of 70¢ per barrel and 10¢ per mcf will be instituted in the first quarter of 1977.

Despite stronger copper markets at home and abroad, the Company's base-metal operations in Canada were hindered by the continuing shortage of experienced underground personnel, notably miners. Consequently, production of copper from the Company's own ores was approximately 23% below expectations although total production was within 4% of budget due to the Company's purchases of concentrates.

The Company's stockpile of zinc at Flin Flon at midyear totalled approximately 11,600 tons, compared with 18,000 tons at the end of the first quarter. The reduction reflects improved markets and the

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